A method of estimating the pitch of a speech signal using an average distance between peaks, use of the method, and a device adapted therefor

ABSTRACT

A method of estimating the pitch of a speech signal (2) comprises the steps of dividing the speech signal into segments, calculating for each segment a conformity function, and detecting peaks in the conformity function. The method further comprises the steps of estimating an average distance between said peaks, and using the estimated average distance as an estimate of the pitch. In this way a method less complex than prior art methods, and thus suitable for small digital signal processors, is provided. The method also avoids the pitch halving situation. When the method is based on the fact that the identified peaks in the conformity function show a periodic behaviour and that the true pitch period actually corresponds to the distance between the peaks, a simpler algorithm is achieved which provides the true pitch period independent on the occurrence of pitch halving, pitch doubling, etc. A similar device is also provided.

Fig. 1 should be published.